use when it is due for any test or inspection required by §229.23, §229.25, §229.27, §229.29, or §229.31, an out-of-use notation showing the number of out-ofuse days shall be made on an inspection line on Form FRA F 6180-49A. A supervisory employee of the carrier who is responsible for the locomotive shall attest to the notation. If the locomotive is out of use for one or more periods of at least 30 consecutive days each, the interval prescribed for any test or inspection under this part may be extended by the number of days in each period the locomotive is out of use since the last test or inspection in question. A movement made in accordance with §229.9 is not a use for purposes of determining the period of the out-of-use credit.

# Subpart C—Safety Requirements

GENERAL REQUIREMENTS

# § 229.41 Protection against personal injury.

Fan openings, exposed gears and pinions, exposed moving parts of mechanisms, pipes carrying hot gases and high-voltage equipment, switches, circuit breakers, contactors, relays, grid resistors, and fuses shall be in non-hazardous locations or equipped with guards to prevent personal injury.

## § 229.43 Exhaust and battery gases.

- (a) Products of combustion shall be released entirely outside the cab and other compartments. Exhaust stacks shall be of sufficient height or other means provided to prevent entry of products of combustion into the cab or other compartments under usual operating conditions.
- (b) Battery containers shall be vented and batteries kept from gassing excessively.

## § 229.45 General condition.

All systems and components on a locomotive shall be free of conditions that endanger the safety of the crew, locomotive or train. These conditions include: insecure attachment of components, including third rail shoes or beams, traction motors and motor gear cases, and fuel tanks; fuel, oil, water, steam, and other leaks and accumulations of oil on electrical equipment that create a personal injury hazard; improper functioning of components, including slack adjusters, pantograph operating cylinders, circuit breakers, contactors, relays, switches, and fuses; and cracks, breaks, excessive wear and other structural infirmities of components, including quill drives, axles, gears, pinions, pantograph shoes and horns, third rail beams, traction motor gear cases, and fuel tanks.

#### BRAKE SYSTEM

#### § 229.46 Brakes: general.

- (a) Before each trip, the railroad shall know the following:
- (1) The locomotive brakes and devices for regulating pressures, including but not limited to the automatic and independent brake control systems, operate as intended; and
- (2) The water and oil have been drained from the air brake system of all locomotives in the consist.
- (b) A locomotive with an inoperative or ineffective automatic or independent brake control system will be considered to be operating as intended for purposes of paragraph (a) of this section, if all of the following conditions are met:
- (1) The locomotive is in a trailing position and is not the controlling locomotive in a distributed power train consist;
- (2) The railroad has previously determined, in conjunction with the locomotive and/or airbrake manufacturer, that placing such a locomotive in trailing position adequately isolates the non-functional valves so as to allow safe operation of the brake systems from the controlling locomotive;
- (3) If deactivation of the circuit breaker for the air brake system is required, it shall be specified in the railroad's operating rules;
- (4) A tag shall immediately be placed on the isolation switch of the locomotive giving the date and location and stating that the unit may only be used in a trailing position and may not be used as a lead or controlling locomotive:
- (5) The tag required in paragraph (b)(4) of this section remains attached